

Application No. 09/401,400
Amendment dated February 28, 2005
Reply to Office Action of December 1, 2005

Docket No. 1232-4570

Amendments to the Claims:

Claims 20-43 are pending in this application. Claims 20, 27-30, 35 and 40-43 are independent.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listings of Claims:

1-19 (CANCELLED):

20 (CURRENTLY AMENDED): An image pick-up server, which has ~~image sensing means~~ a camera, for performing a distribution service which distributes video information obtained by ~~said image sensing means~~ the camera to a client via a network, comprising:

a storage means for setting device adapted to set a plurality of shootable areas, which are the object of the distribution service, within a range in which shooting direction of said image sensing means camera can be changed, and storing to store information relating to the plurality of shootable areas set and information which specifies a plurality of virtual image sensing means cameras for respective ones of the shootable areas; and

a notifying device adapted to notify the client of the identification information of plurality of virtual cameras stored by said storage device;

a receiving device adapted to receive a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified by said notifying device; and

a control means for reading device adapted to read out, from said storage means device, information corresponding to virtual image sensing means selectively designated camera selected by the client, setting after receiving the selection command from the client, to set a

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range in which it is possible to change the shooting direction of said ~~image-sensing-means~~
camera based upon the information relating to the shootable area indicated by the information
that has been read out, and ~~controlling to control~~ said ~~image-sensing-means~~ camera within the
range in which it is possible to change the shooting direction.

21 (CURRENTLY AMENDED): The server according to claim 20, wherein said storage
~~means device~~ stores, with respect to said plurality of shootable areas, identification numbers of
respective ones of said virtual ~~image-sensing-means~~ camera, and information indicating ranges of
pan and tilt angles of said ~~image-sensing-means~~ camera.

22 (CURRENTLY AMENDED): The server according to claim 21, wherein said storage
~~means device~~ stores information indicating ranges over which zoom magnification can be
changed with respect to said plurality of shootable areas.

23 (CURRENTLY AMENDED): The server according to claim 20, wherein said control
~~means device~~ includes ~~means for inhibiting a~~ inhibiting device adapted to inhibit distribution of
video information, which has been obtained by said ~~image-sensing-means~~ camera, during
changing of the shooting direction of said ~~image-sensing-means~~ camera in order to change over
the virtual ~~image-sensing-means~~ camera.

24 (ORIGINAL): The server according to claim 20, wherein information relating to the
shootable areas is stored in the server.

25 (CURRENTLY AMENDED): A client connected to the image pick-up server set forth in
claim 20, comprising:

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a selection notification ~~means for selecting device adapted to select~~ one of said virtual image sensing ~~means~~ camera that have been stored in said storage ~~means~~ device and notifying said image pick-up server of the information specifying the selected virtual image sensing ~~means~~ camera;

a display ~~means for displaying device adapted to display~~ an image distributed by said image pick-up server; and

a shooting-direction change designation ~~means for changing device adapted to change~~ the shooting direction of the virtual image sensing ~~means~~ camera selected by said selection notification ~~means~~ device and instructing said server of result of the change.

26 (ORIGINAL): The client according to claim 25, wherein the information relating to the shootable areas is downloaded from said image pick-up server.

27 (CURRENTLY AMENDED): An image pick-up system comprising an image pick-up server, which has image sensing ~~means~~ a camera, for performing a distribution service which distributes video information obtained by ~~the image sensing means~~ said camera to a client via a network, and a client for receiving the video information from said image pick-up server, wherein said image pick-up server includes:

a storage ~~means for setting device adapted to set~~ a plurality of shootable areas, which are the object of the distribution service, within a range in which shooting direction of said image sensing ~~means~~ camera can be changed, and ~~storing to store~~ information relating to the plurality of shootable areas set and information which specifies a plurality of virtual image sensing ~~means~~ camera for respective ones of the shootable areas; and

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a notifying device adapted to notify the client of the identification information of plurality of virtual cameras stored by said storage device;

a receiving device adapted to receive a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified by said notifying device; and

a control means for reading device adapted to read out, from said storage means device, information corresponding to virtual image-sensing means selectively designated camera selected by the client, setting , after receiving the selection command from the client, to set a range in which it is possible to change the shooting direction of said image-sensing means device based upon the information relating to the shootable area indicated by the information that has been read out, and controlling to control said image-sensing means camera within the range in which it is possible to change the shooting direction; and

said client includes:

selection notification means for selecting device adapted to select one of said virtual image-sensing means cameras that have been stored in said storage means device and notifying to notify said image pick-up server of the information specifying the selected virtual image-sensing means camera;

a display means for displaying device adapted to display an image distributed by said image pick-up server; and

a shooting-direction change designation means for changing device adapted to change the shooting direction of the virtual image-sensing means camera selected by said selection notification means device and instructing to instruct said server of result of the change.

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28 (CURRENTLY AMENDED): A method of controlling an image pick-up server, which has ~~image sensing means~~ a camera, for performing a distribution service which distributes video information obtained by ~~the image sensing means~~ said camera to a client via a network, said method comprising:

a storage step of setting a plurality of shootable areas, which are the object of the distribution service, within a range in which shooting direction of said ~~image sensing means~~ camera can be changed, and storing, in ~~prescribed a storage means~~ device, information relating to the plurality of shootable areas set and information which specifies a plurality of virtual ~~image sensing means~~ camera for respective ones of the shootable areas; and

a notifying step of notifying the client of the identification information of plurality of virtual cameras stored in said storage step;

a receiving step of receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified in said notifying step; and

a control step of reading out, from said storage ~~means~~ device, information corresponding to a virtual ~~image sensing means~~ selectively designated camera selected by the client after receiving the selection command from the client, setting a range in which it is possible to change the shooting direction of said ~~image sensing means~~ camera based upon the information relating to the shootable area indicated by the information that has been read out, and controlling said ~~image sensing means~~ camera within the range in which it is possible to change the shooting direction.

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29 (CURRENTLY AMENDED): A storage medium storing program code which, by being read in and executed by a computer, functions as an image pick-up server, which has ~~image sensing means~~ a camera, for performing a distribution service which distributes video information obtained by ~~the image sensing means~~ said camera to a client via a network, said storage medium storing program code which functions as:

~~a storage means for step of~~ setting a plurality of shootable areas, which are the object of the distribution service, within a range in which shooting direction of said ~~image sensing means~~ camera can be changed, and storing, in a storage device, information relating to the plurality of shootable areas set and information which specifies a plurality of virtual ~~image sensing means~~ cameras for respective ones of the shootable areas; and

a notifying step of notifying the client of the identification information of plurality of virtual cameras stored in said storage step;

a receiving step of receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified in said notifying step; and

~~a control means for step of~~ reading out, from said storage ~~means~~ device, information corresponding to ~~a virtual image sensing means~~ selectively designated camera selected by the client after receiving the selection command from the client, setting a range in which it is possible to change the shooting direction of said ~~image sensing means~~ camera based upon the information relating to the shootable area indicated by the information that has been read out, and controlling said ~~image sensing means~~ camera within the range in which it is possible to change the shooting direction.

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30 (CURRENTLY AMENDED): An image pick-up server for distributing image information obtained by ~~an image sensing apparatus~~ a camera to a client via a network, comprising:

storage device for storing a plurality of control ranges, which are the objects of the distribution, within ~~[[a]] an entire range in which sensing direction of the image sensing apparatus can be changed~~ the camera is sensible, and storing identification information which specifies a plurality of virtual cameras for respective ones of the control ranges~~[[: and]]~~

a notifying device for notifying the client of the identification information of plurality of virtual cameras stored by said storage device;

a receiving device for receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified by said notifying device; and

a control device for controlling said image sensing apparatus camera within the control range corresponding to the ~~Identification~~ identification information of the virtual camera selected by the client after receiving the selection command from the client.

31 (PREVIOUSLY PRESENTED): The image pick-up server according to claim 30, wherein each of control ranges is defined by variable range of at least one of pan, tilt, and zoom of said image sensing apparatus.

32 (CURRENTLY AMENDED): The image pick-up server according to claim 30, wherein said control device controls said image sensing~~[[,]]~~ apparatus in accordance with ~~the~~ a control command from the client, and when the control command exceeds the control range, said control device resets the control command to be within the control range.

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33 (CURRENTLY AMENDED): The image pick-up server according to claim 30, further comprising a changing device for changing the virtual camera in accordance with the selection information received from the client.

34 (PREVIOUSLY PRESENTED): The image pick-up server according to claim 33, wherein distribution of image information to the client is inhibited during changing the virtual camera by said changing device.

35 (CURRENTLY AMENDED): An ~~image~~ image pick-up server for distributing image information obtained by ~~an image sensing apparatus~~ a camera to a client via a network, comprising:

a storage device for storing a plurality of control ranges, which are the objects of the distribution, within [[a]] an entire range in which sensing direction of the image sensing apparatus can be changed the camera is sensible, and storing identification information which specifies a plurality of virtual cameras for respective ones of the control ranges; and

a notifying device for notifying the client of the identification information of plurality of virtual cameras stored by said storage device;

a receiving device for receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified by said notifying device; and

a distributing device for distributing the image information within the control range corresponding to the identification information of the virtual camera selected by the client after receiving the selection command from the client.

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36 (CURRENTLY AMENDED): The image pick-up server according to claim 35, wherein each of control range is defined by variable range of at least one of pan, tilt, and zoom of said ~~Image~~ image sensing apparatus.

37 (CURRENTLY AMENDED): The ~~Image~~ image pick-up server according to claim 35, wherein said distributing device distributes the image information in accordance with the a control command from the client, and when the control command exceeds the control range, said distributing device ~~reset~~ resets the control command to be within the control range.

38 (CURRENTLY AMENDED): The image pick-up server according to claim 35, further comprising a changing device for changing the virtual camera in accordance with the selection ~~Information~~ information received from the client.

39 (CURRENTLY AMENDED): The ~~Image~~ image pick-up server according to claim 38, wherein said distributing device does not distribute image information to the client during changing the virtual camera by said changing device.

40 (CURRENTLY AMENDED): A method of controlling an image pick-up server for distributing image information obtained by ~~an image sensing apparatus~~ a camera to a client via a network, said method comprising:

a storage step of storing a plurality of control ranges, which are the objects of the distribution, within ~~[[a]]~~ an entire range in which sensing direction of the image sensing apparatus can be changed the camera is snesible, and storing ~~Identification~~ identification

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information which specifies a plurality of virtual cameras for respective ones of the control ranges; and

a notifying step of notifying the client of the identification information of plurality of virtual cameras stored in said storage step;

a receiving step of receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified in said notifying step; and

a control step of controlling said ~~image-sensing apparatus~~ camera within the control range corresponding to the identification information of the virtual camera selected by the client after receiving the selection command from the client.

41 (CURRENTLY AMENDED): A method of distributing image information obtained by ~~image-sensing apparatus~~ a camera from an image pick-up server to a client via a network, said method comprising:

a storing step of storing a plurality of control ranges, which are the objects of the distribution, within ~~[[a]]~~ an entire range in which ~~sensing direction of the image-sensing apparatus can be changed~~ the camera is sensible, and storing identification information which specifies a plurality of virtual cameras for respective ones of the control ranges; and
a notifying step of notifying the client of the identification information of plurality of virtual cameras stored in said storage step;

a receiving step of receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified in said notifying step; and

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a distributing step of distributing the image information within the control range corresponding to the identification information of the virtual camera selected by the client after receiving the selection command from the client.

42 (CURRENTLY AMENDED): A storage medium storing program code which, by being read in and executed by a computer, functions as an image pick-up server for distributing image information obtained by ~~an image sensing apparatus~~ a camera to a client via a network, said storage medium storing program code which functions as:

a storage step of storing a plurality of control ranges, which are the objects of the distribution, within ~~[[a]]~~ an entire range in which ~~[[.]]sensing direction of the image sensing apparatus can be changed~~ the camera is sensible, and storing identification information which specifies a plurality of virtual cameras for respective ones of the control ranges; and

a notifying step of notifying the client of the identification information of plurality of virtual cameras stored in said storage step;

a receiving step of receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified in said notifying step; and

a control step of controlling said ~~image sensing apparatus~~ camera within the control range corresponding to the identification information of the virtual camera selected by the client after receiving the selection command from the client.

43 (CURRENTLY AMENDED): A storage medium storing program code which, by being read ~~in~~ in and executed by a computer, functions as an image pick-up server for distributing

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~~Image Information~~ image information obtained by ~~Image-sensing apparatus~~ a camera to a client via a network, said storage medium storing program code which functions as:

a storing step of storing a plurality of control ranges, which are the objects of the distribution, within ~~[[a]]~~ an entire range in which sensing direction of the image-sensing apparatus can be changed the camera is sensible, and storing identification information which specifies a plurality of virtual cameras for respective ones of the control ranges; and

a notifying step of notifying the client of the identification information of plurality of virtual cameras stored in said storage step;

a receiving step of receiving a selection command from the client selecting one of the plurality of virtual cameras corresponding to the identification information notified in said notifying step; and

a distributing step of distributing ~~the~~ image information within the control range corresponding to the identification information of the virtual camera selected by the client after receiving the selection command from the client.